



Mineral Mobility Improvements Project

Virtual Open House

June 22, 2022

Welcome!

Agenda

- Project introduction
- Summary of alternatives analysis results
- Alternatives development, screening, and results by location
- Next steps
- Group discussion/Q&A

Meeting Objectives

- Share alternatives screening results from the alternatives evaluation process
- Gather feedback to inform preliminary design

<https://www.mineralmobilityimprovements.com>



Project Team Presenters



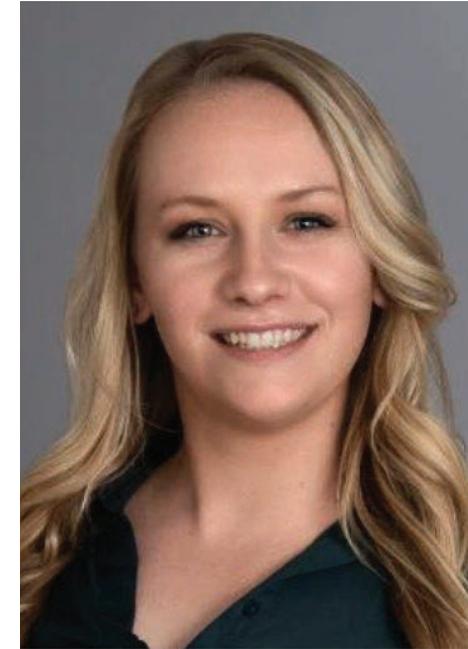
Aaron Heumann
City of Littleton
Transportation
Engineering Manager



Shane Roberts
City of Littleton
Transportation
Planner



Hannah Polow
David Evans and
Associates, Inc.
Planner



Rae Stephani
Y2K Engineering
Transportation
Project Engineer



Leah Langerman
David Evans and
Associates, Inc.
Public Engagement



Have you been involved with this project before today?



Submitted comments online Dec. 2021/Jan. 2022



Attended Feb. 2022 focus group virtual meeting

0

Called or emailed with a project representative



Visited the website



Submitted feedback on the website



I haven't been involved

Project Introduction



Project Purpose & Funding

Purpose

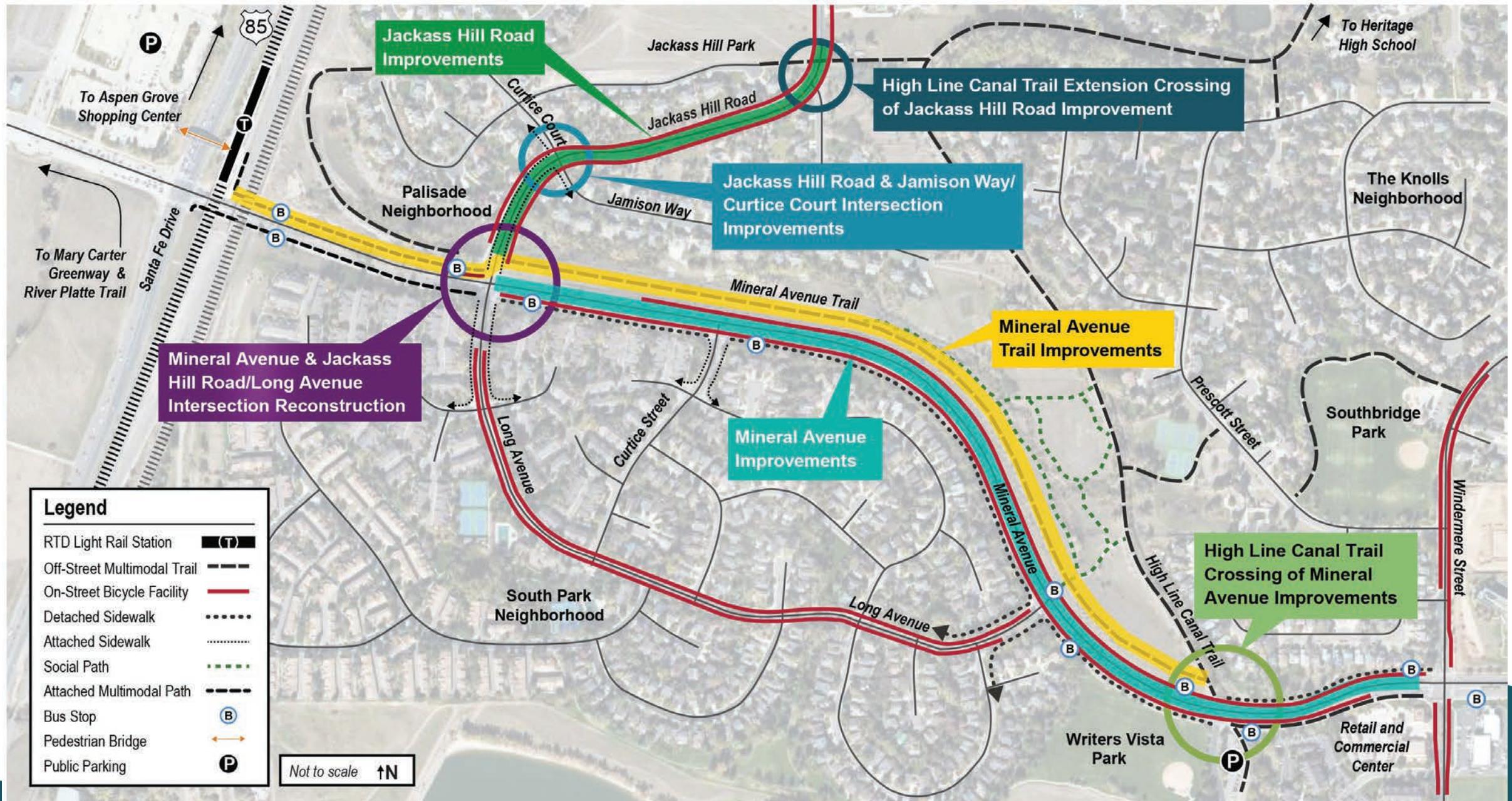
- Create safer and more complete travel options for bicyclists and pedestrians



Funding

- Safer Main Streets Grant
 - ✧ CDOT grant of \$2M to City
 - ✧ To encourage and safely accommodate active travel within this area of the one-mile travel shed of Mineral Light Rail Station
 - ✧ Allows funding for improvements related to grant purpose
 - » Other improvements may be identified and gain momentum

Project Area & Locations of Focus



Legend	
RTD Light Rail Station	(T)
Off-Street Multimodal Trail	---
On-Street Bicycle Facility	—
Detached Sidewalk
Attached Sidewalk
Social Path
Attached Multimodal Path	---
Bus Stop	(B)
Pedestrian Bridge	→
Public Parking	(P)

Not to scale ↑N

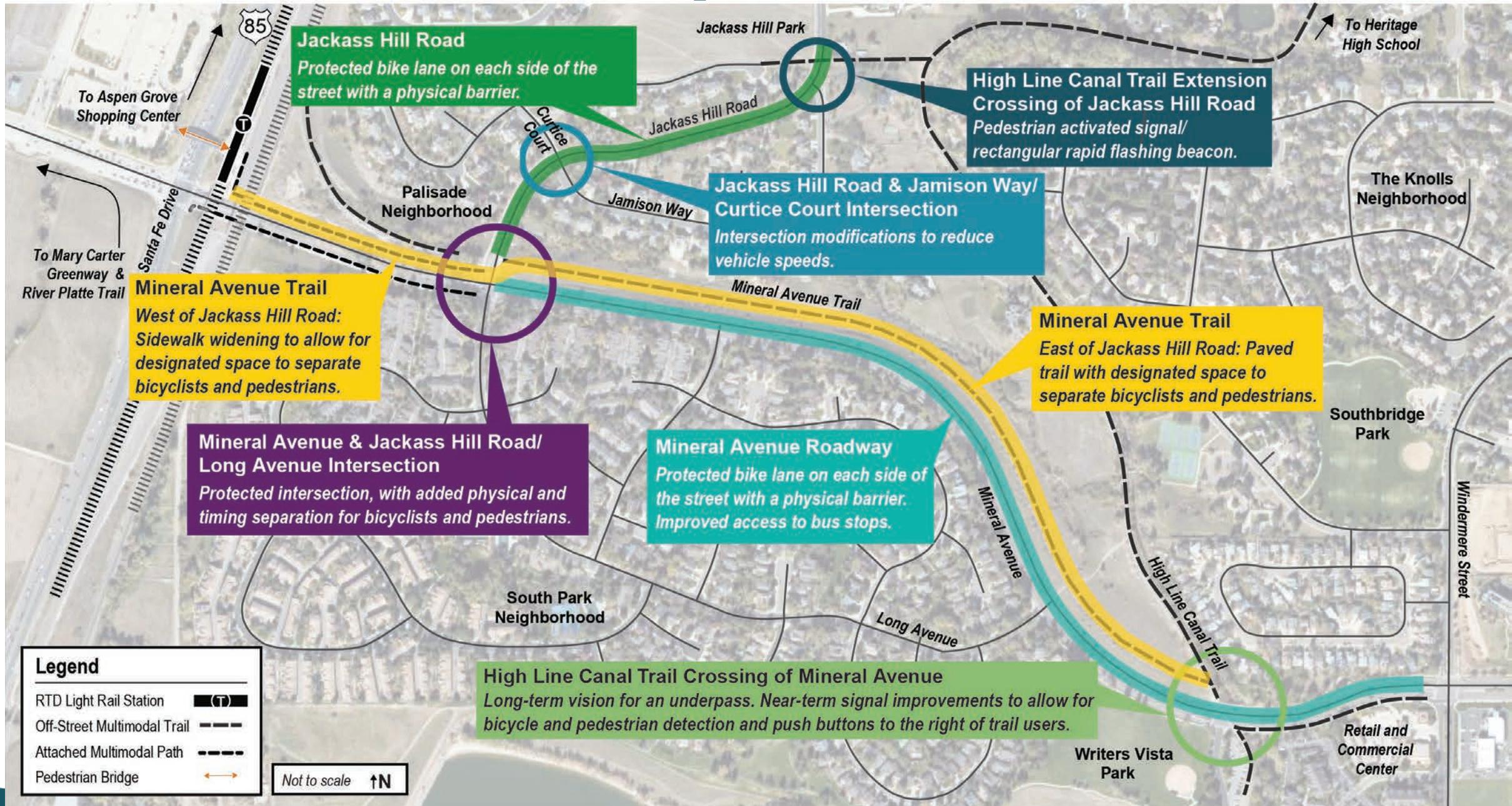
Summary of Alternatives Analysis Results



Mineral
Mobility
Improvements

Alternatives Analysis Results

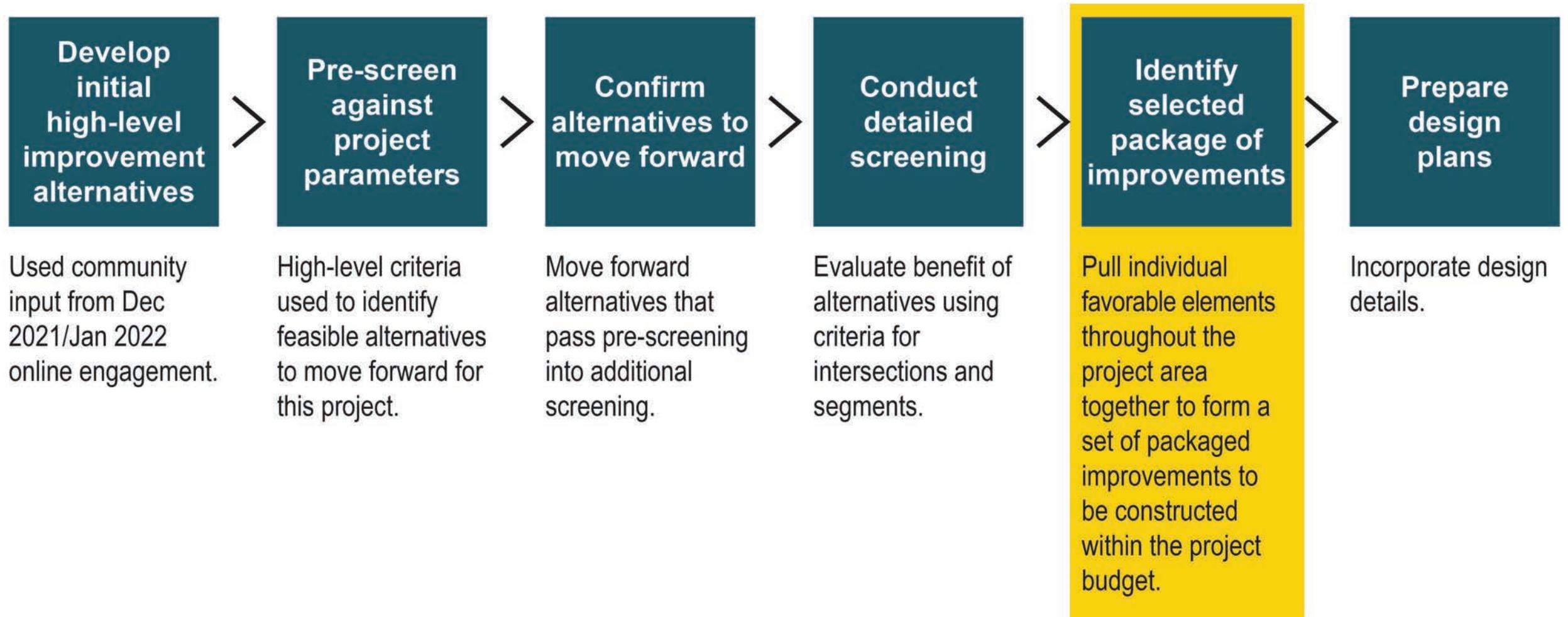
Budget-Dependent
\$2M Limit



Alternatives Development and Screening



Alternatives Development Process



Pre-Screening Criteria

Project Parameters

- Reasonable cost



- Reasonable timeframe for construction
- Works within existing right-of-way
- Meets project goals
- Consistent with Littleton's Transportation Master Plan goals

Screening Criteria

Criteria	High Score Definition
Safety potential for pedestrians	Separation between pedestrians and vehicles
Safety potential for bicyclists	Separation between bicyclists and vehicles
Safety potential for vehicles	Direct safety benefit (signal timing improvements)
Future traffic conditions	Improved operations
Mode improvement	Enhanced facility for at least one mode
Right-of-way	No right-of-way modifications
Ease of maintenance (segments only)	Ability to maintain with current resources
Local plans	Consistency with local plans

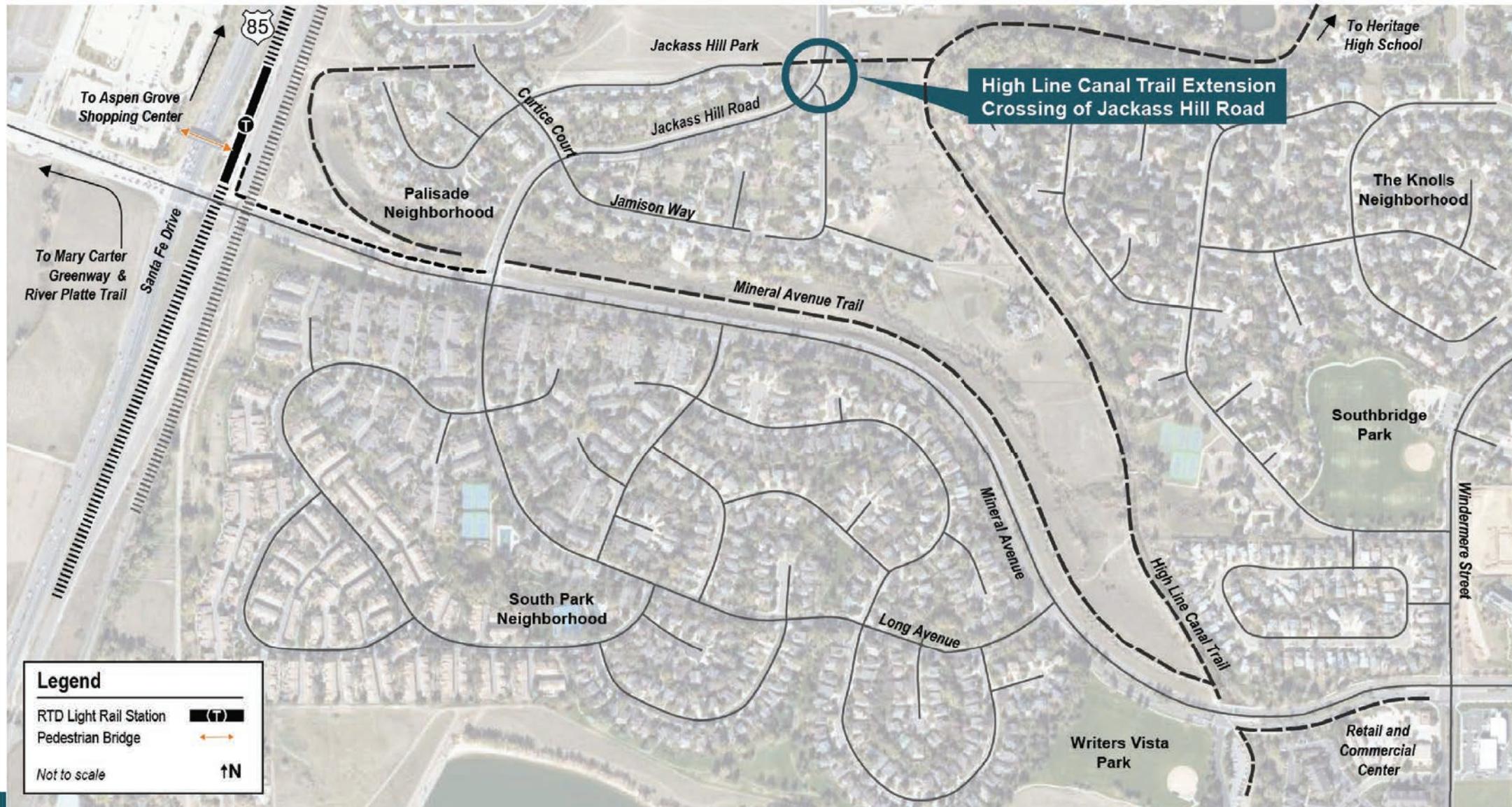
Alternatives Analysis Results by Location



Mineral
Mobility
Improvements

Focus Area

High Line Canal Trail Crossing of Jackass Hill Road



Alternatives Analysis Results

High Line Canal Trail Crossing of Jackass Hill Road



- Pedestrian activated signal/rectangular rapid flashing beacon (RRFB)
 - Advanced flasher for northbound
 - Road treatment will be evaluated



- ❖ Safety improvement for bicyclists and pedestrians
- ❖ Creates a gap in traffic for trail users

What adjustments should be made to the High Line Canal Trail Crossing of Jackass Hill Road improvement as the project moves into design?

Our Littleton Comprehensive Plan calls for the prioritization of bike and ped users. RRFB signals put drivers first--as a request to allow them to use road. Would you consider RAISED CROSSING here in addition. Or even in lieu?

Cars turning right must stop! My foot was run over when a car didn't stop and I had the walk light.

Holly between Arapahoe and Orchard has a pedestrian signal that works well

City needs to purchase the strip of land that connects the High Line Canal trail to Jackass Hill Road as it is private subject to closure at any time

Possible rumble strips before crossing (particularly in the northbound direction) as well as pedestrian activated signage

Will northbound drivers have enough warning that there is a crosswalk, so they don't rear-end vehicles that are already stopped?

Yes at St Mary's , Rumble strips before the new signal

The trail crossing east of Jackasshill Road is NOT public ROW. This trail needs to be acquired by SSPRD

Did you see my comment?

What adjustments should be made to the High Line Canal Trail Crossing of Jackass Hill Road improvement as the project moves into design?

Perhaps a sign that cars turning right to watch for pedestrians or stop.

A raised crosswalk makes the pedestrian/bike rider realm the inherent (most favored) state of the roadway... and cars crossing the raised crossing are the ones slowing down (and invited as guests into space).

Ambiguity when cars get a stop signal often creates risky situations.

very visible lights on jackass hill road as people drive fast on this road

I have used pedestrian activated signals. Why do some of them require that you crossed the trail in order to activate the button instead of being on the right side of the trail it's on the left side of the trail as you approach the road that you will

A bicycle friendly curb is needed at the west end of the crossing trail where it connects with W Dry Creek Court. I don't believe rumble strips will help if you do advanced beacon for N. bound traffic, most everybody knows the crossing is there.

Dry Creek Road, between Broadway and University (I think it's in Littleton, but is close to the border with Centennial. Seems to work well. Comment as a cyclist, I'm OK waiting for an opening in traffic, so that no cars are present when I cross.

A second flasher light needs to be added south and a bit down the hill and around the corner as drivers speed up the hill to the turn and don't have time to react to pedestrians and bikes

Median/Ped Refuge in centerline is a good idea. Would like that here.

What adjustments should be made to the High Line Canal Trail Crossing of Jackass Hill Road improvement as the project moves into design?

When cars approach a flashing signal, if it's not clear if they're stopping, it's a more hazardous situation than if I just wait for a gap in traffic.

Flashing signal most helpful at high Traffic volume. Is there enough traffic on Jackass Hill?

Protected lanes will be a great safety improvement.

I can't get hit by a car that isn't there m

Either of these work. I prefer the curb modules because it leaves more room for the bike lane. Narrow bike lanes need to be wide enough for other bikes to pass easily with out space encroachment. Older folks need room for their less balanced ridin

A traffic circle without a 4 way stop only encourages drivers to merge and continue. It will not improve bike safety even if there are stop signs on the minor streets.

What about narrower lanes? posts to slow drivers?

A protected lane in this space would not only be great for bikers but also for pedestrians— and would slow car speeds along the road as well.

No roundabout it will not improve safety.

Focus Area

Jackass Hill Road



Alternatives Analysis Results

Jackass Hill Road

- Protected bike lane with one lane in each direction



- ✧ Physical separation between bicyclists and vehicles
- ✧ Supports the City's vision for protected bike lanes identified in Transportation Master Plan

What adjustments should be made to the Jackass Hill Road improvements as the project moves into design?

Like the physical barrier aspect.

A protected bike lane here is unnecessary and therefore a waste of our assets. Have there been crashes? I know of one in 40 years! Don't do it.

I urge you to install PBL in first phase, as attention to these kinds of projects fade in short order. And it's easy to imagine the barriers never get implemented.

Love to see the protected bike lanes. Need barriers here between vehicles. Prefer armadillo or low curbs to simply plastic bollards. Car speed here is way too high -- so please make car lanes narrow. And barriers substantial.

The law says we need to have a 3 ft clearance between the car and the biker. I like the barrier but recognize the challenges - possibly paint the lane a different color?

Not sure protected lanes are a good value on Jackass Hill. Where is the high volume route that depends on Jackass Hill?

I work for Denver and bike there - they have many types of protected bike lane

Protected bike lanes are a must, thanks! Don't use the plastic pillars that get run over and destroyed, worth it to put in a more protective barrier.

Need a higher, more visible vertical barrier because an SUV or truck could easily jump a curb.

What adjustments should be made to the Jackass Hill Road improvements as the project moves into design?

Physical barrier keeps bicycles off the walkers trail too.

There was a car crash on Prince St (the northern end of this street) where a pedestrian was hit. That occurred this year. The roadway is contiguous -- though it isn't Jackass Hill Drive per se. The speeds here are dangerous and barriers are key.

To address maintenance aspect , what about PED sidewalk on one side(south/east) and bikes on the other sidewalk (n/w) into a bike lane

There is a power or some type of tall box at the NE corner coming up Mineral to Jackass Hill that blocks drivers views of bikes and pedestrians crossing going west. Cars speed down Jackass Hill to Mineral to turn right and only look west

Alternative to Jackass Hill - better connection between Prince ("above" Jackass Hill) and Mineral, either at the Highline Canal or Windermere / Southpark Lane

Aaron - your striping of bike lane needs to be consistent, too. It's different across the City

There isn't a large pedestrian use there either Aaron

Cars turning right from Jackass Hill to Mineral never look right to see pedestrians or bikes

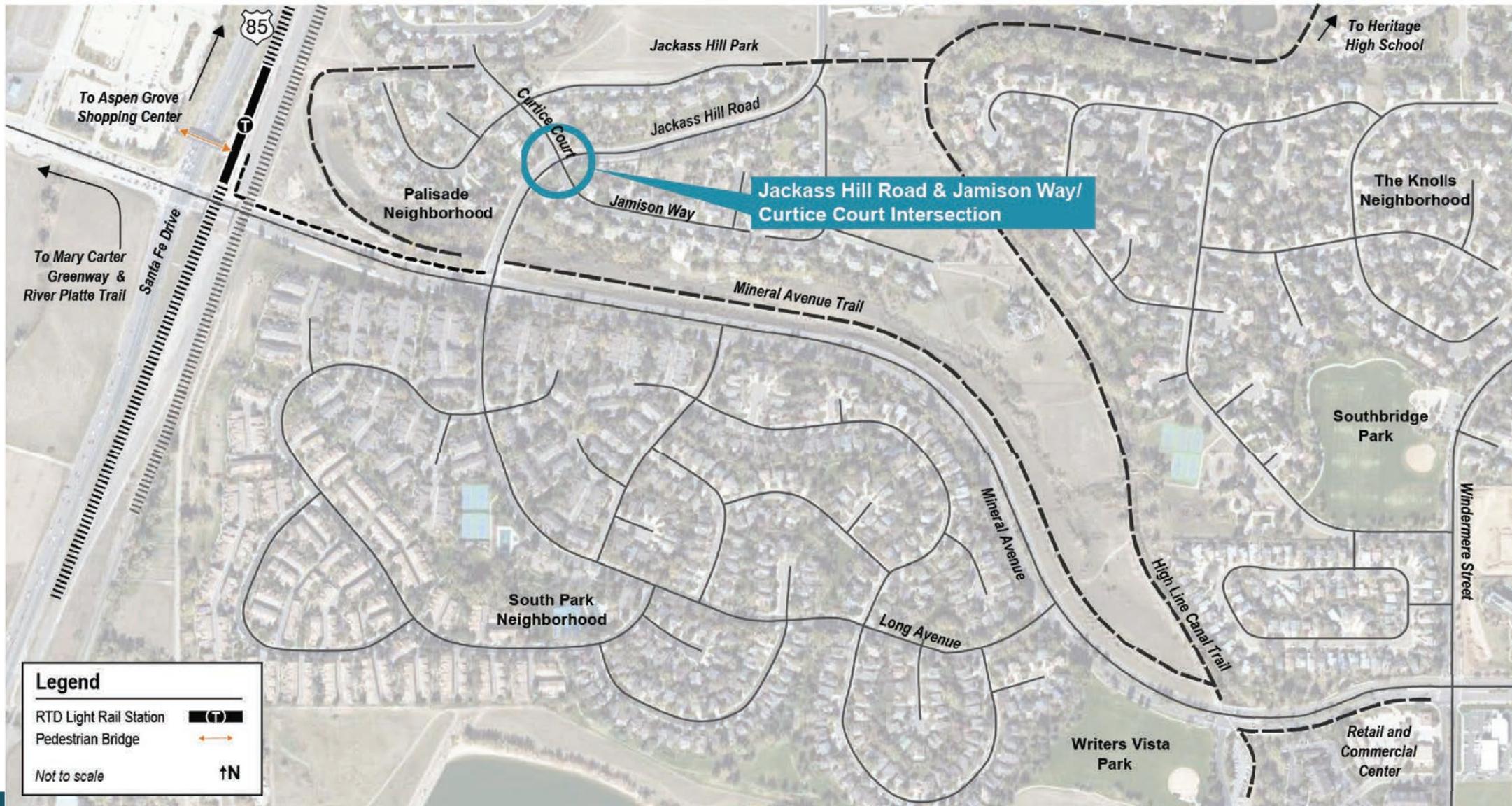
I like the roundabout solution. Getting vehicle speeds DOWN here is very important.

What adjustments should be made to the Jackass Hill Road improvements as the project moves into design?

Drop the speed limit coming up to the intersection from 30 to 20 and put caution lights. People race down the hill at the curve

Focus Area

Jackass Hill Road and Jamison Way/Curtice Court Intersection



Alternatives Analysis Results

Jackass Hill Road and Jamison Way/Curtice Court

- Intersection modifications to reduce vehicle speeds, such as:
 - Traffic circle or mini-roundabout



- ❖ Safer conditions for all modes due to slower vehicle speeds
- ❖ All turning movements allowed
- ❖ Design fits within existing right-of-way



What adjustments should be made to the Jackass Hill Rd and Jamison Way/Curtice Court intersection as the project moves into design?

Is the problem vehicles coming out of the neighborhood?

Thumbs up on a roundabout here.

Yes, stop controls on the side streets.

Would this back up North bound traffic back to mineral?
Other wise I like the concept .

During peak periods, Jackass Hill is a viable North-South alternative to Santa Fe for vehicles. Is it a good trade for impeding vehicle traffic for intermittent pedestrian crossings?

Again. No history of crashes is provided

I like the round-about idea however- I would prefer it at Rangeview and Prince. These mini round-about are all around the area of Gallup/Elati near Euclid and Runyon- should add at Rangeview for Heritage HS

NO!!! No traffic circles!!! Emergency vehicle speeds are reduced. People will die from the delay. Fire trucks weigh too much to go over the circle like a bus. What are you thinking?

There are relatively small residential neighborhoods on both sides of this intersection. What's the usage volume? How "big" of a traffic calming solution is appropriate?

What adjustments should be made to the Jackass Hill Rd and Jamison Way/Curtice Court intersection as the project moves into design?

Yes to a roundabout here. Please do it.

This isn't an appropriate place for a real roundabout

no roundabout here!!! it will not improve safety.

Not sure a roundabout is justified, especially if a flashing signal is installed uphill.

I very much appreciate your pro-active approach to safety here. We should not be waiting for the "number of deaths to qualify for improvements"

Try the crash history at Mineral and Santa Fe

The city fathers didn't even want a \$55,000 traffic signal - but they finally but the bullet and the signal works great. An underpass is costly and wasteful of our public resources.

Signal triggers, timing that balances vehicle and trail user needs, and signage that explains why sometimes the signal triggers immediately when you hit the button, and at other times, there's a long wait.

Diagonal nature of the Crossing makes it a longer and more time consuming traverse for pedestrians than it needs to be

What adjustments should be made to the Jackass Hill Rd and Jamison Way/Curtice Court intersection as the project moves into design?

Make the crossing 90 degrees to the road, and shorten the duration of the red light.

Any safety issues with stop sign on Peninsula Drive, colocated with the traffic light regulating Mineral? It's an odd configuration.

How often are the current user activated signals used? Is there adequate demand for an underpass? I don't think so.

I ride Mineral a lot. There's a lot of pavement for the traffic volume, and I don't regard it as an especially hazardous cycling route.

I'm not in favor of anything that impedes snow removal Mineral, especially on the South (uphill) side, which is heavily shaded..

Mineral is my #1 cycling route to access other local off-road trails (year -round). Please don't mess that up....

Focus Area

High Line Canal Trail Crossing of Mineral Avenue



Alternatives Analysis Results

High Line Canal Trail Crossing of Mineral Avenue

- Crossing improvements
 - ✧ Bicycle and pedestrian detection
 - ✧ Push buttons to the right of trail users



- ✧ Meaningful, cost-effective improvement with the long-term vision of an underpass
- ✧ Improves current conditions in the short term
- ✧ Supports the City's long-term vision of creating an underpass

What adjustments should be made to the High Line Canal Trail Crossing of Mineral Avenue as the project moves into design?

The light currently changes quickly when the walker, bicycle or runner presses the button.

Are you considering bulb-out sidewalk extensions here? Would that shorten the crossing for bike/walking people? Or is it already at minimum width for the crossing?

How does the detection feature work? When someone isn't ready to cross, does it still stop traffic and for how long?

Put flashing caution lights to the east and west as cars come around the sharp turns to the crossing

The trees along the north side of mineral need to be trimmed in order to see the cross walk light sooner. A flashing light indicating a light/crosswalk ahead might be helpful.

Lower speed limit on either side of the crossing since people usually drive 60 mph in the 40 mph area

What is ballpark for a sub grade crossing?

A signal switch need to be included on the west side of the Peninsula Street as well as on the Highline Canal side.

Make sure it covers people turning east out of the park, I often see people turn there when signal is on without noticing it.

What adjustments should be made to the High Line Canal Trail Crossing of Mineral Avenue as the project moves into design?

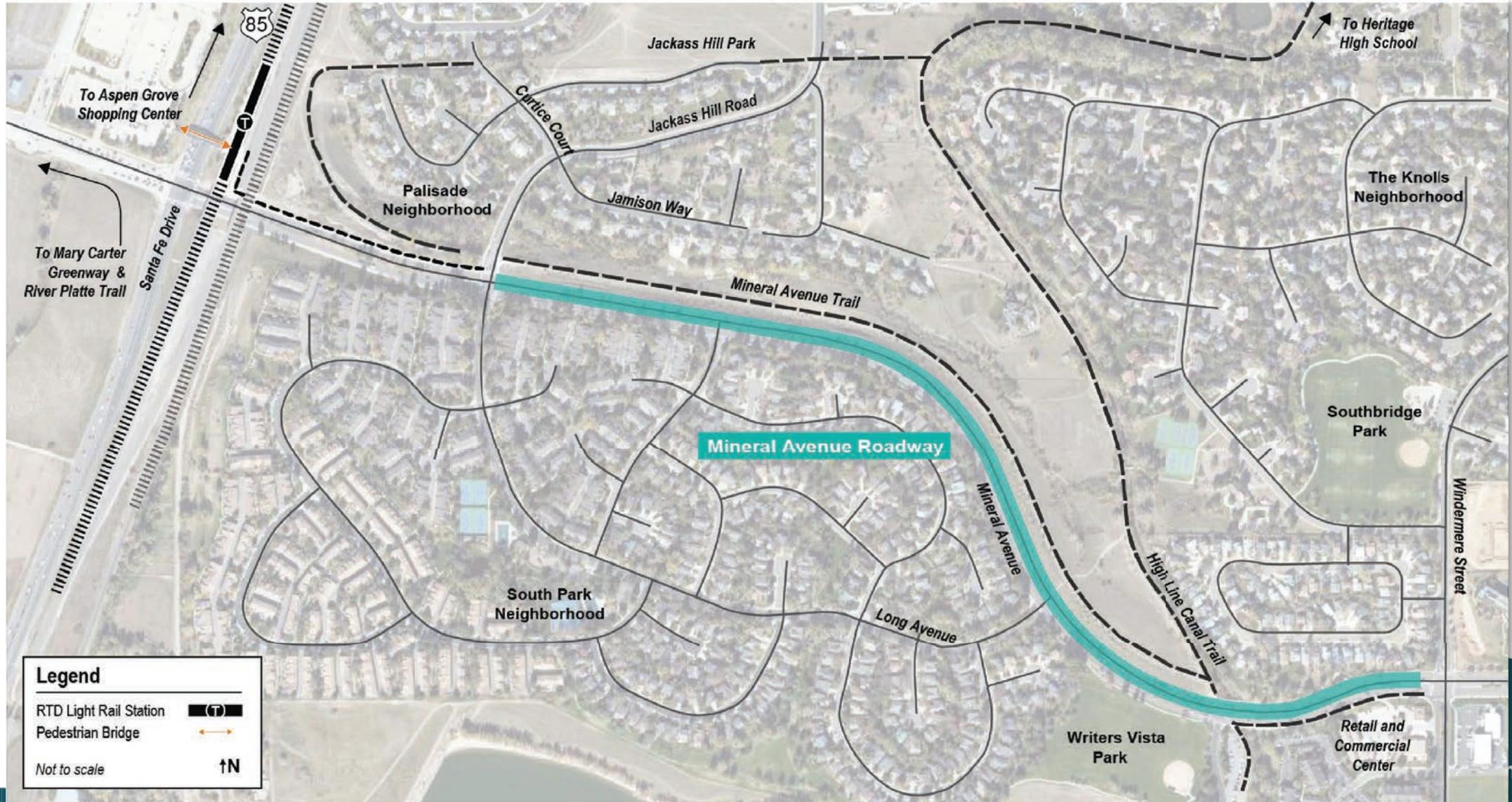
How about diverting the trail crossing to the island/median there, rather than on the diagonal from trailhead to trailhead.

I favor automatic detection, not "press the button" for any signal.

We love how quick the light turns to yellow and red now when we push the button. We cross twice a morning seven days a week

Focus Area

Mineral Avenue



Alternatives Analysis Results

Mineral Avenue

- Protected bike lane with two travel lanes in each direction



- Physical separation between bicyclists and vehicles
- Supports the City's vision for protected bike lanes identified in Transportation Master Plan

What adjustments should be made to the Mineral Avenue improvements as the project moves into design?

Why protected bike lanes when there is a suitable trail right there

Give the \$2 million to the police and they enforce speed limits, etc

Why not Direct bicyclists and pedestrians to the trail instead of spending the money on a protected bike lane on the road on Monroe

I would like to see the bike lane on this section of mineral removed, particularly on the north side of street. Please just pave the old rail trail to the north for bikes and have bikes route to it.

Will the protected lanes reduce the width of lanes that will reduce the space for cars when there is so much volume

I agree: a PBL here is essential for allowing safe and comfortable biking along this corridor. It does align with the Comp Plan, though there are a dozen other streets that need PBLs.

Am assuming bike lanes are one-way. Potential issue with westbound bicyclists who want to turn left into the east entrance of SouthPark.

You haven't considered my comments from years past for a bus pullout on the West side of the railroad overpass. The bikes should be separated onto a bike trail to make room for the bus pullout.

I believe wider sidewalks that will accommodate biking will be better than a protected bike line unless it was done the entire distance from University to Wadsworth and I know some of that is not Littleton's

What adjustments should be made to the Mineral Avenue improvements as the project moves into design?

Why does someone from the hospital need a bike lane, Aaron?

Higher, more visible barrier. Also don't make sidewalks any narrower

In the winter when bicycles travel on the path it leaves huge ruts and makes walking dangerous!

It was my comment that gave us a led path from the West into the LRT station. Listen carefully to my comments

I typed west - meant east

Make a bus pullout westbound Mineral - use three lane

West of jackass hill , how far does the ROW extend north of the current sidewalk

Like the proposal

!#*&!\$

Focus Area

Mineral Avenue Trail



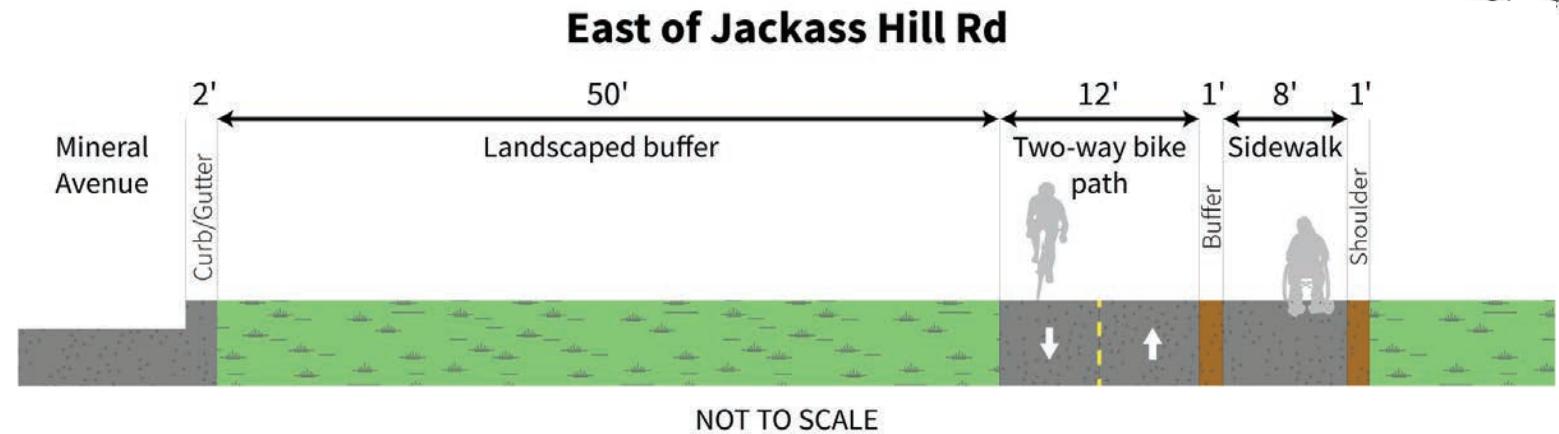
Alternatives Analysis Results



Mineral Avenue Trail

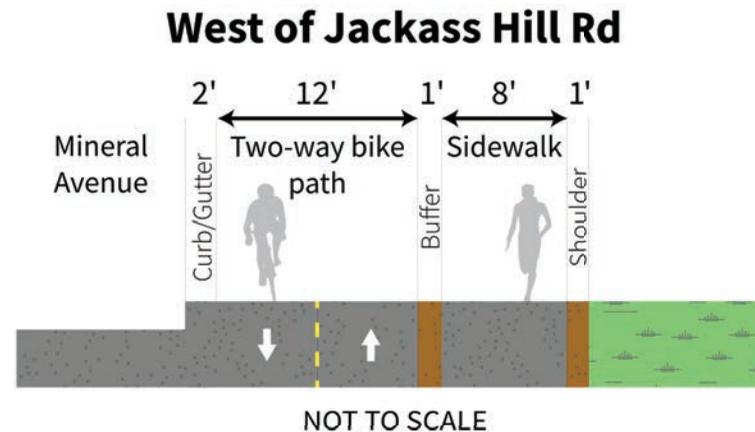
East of Jackass Hill Road:

- Pave trail with designated space for bicyclists/ pedestrians



West of Jackass Hill Road:

- Expand sidewalk with designated space for bicyclists/pedestrians



- ✧ Separate space for bicyclists and pedestrians
- ✧ Support for the City's vision for a shared use path west of Jackass Hill

What adjustments should be made to the Mineral Avenue Trail improvements as the project moves into design?

The proposed option for West of Jackass has low value to me. I bike that a lot. It's very rare to see a number of bicycles and/or pedestrians at one time to justify the cost of a wider sidewalk.

A lot of off leash dogs on the trail now - safety issue. Need more signage re 6 ft. leash law, plus spot enforcement.

The East of Jackass option is compelling, especially if it's a *supplement* to the bike lane in the roadway, and/or if snow removal on the path was assured.

I don't believe we should waste grant money on a protected bike lane along mineral at this point, I like the idea of paving the mineral ave trail and expanding the sidewalk to the west.

How much ROW is there north of the current sidewalk

Are you aware the Lumen/Century Link (former) facility is vacasnd Lumen will not occupy it any longer

We need to make sure that the cross streets by the bike path have signage so people stop before the path and look both ways before moving up to mineral.

Proposal west if Mineral is good and critical as the sidewalk is too narrow as it is and the bicycles go way too fast and endanger the walkers. We walk that six days a week down to and back from the river

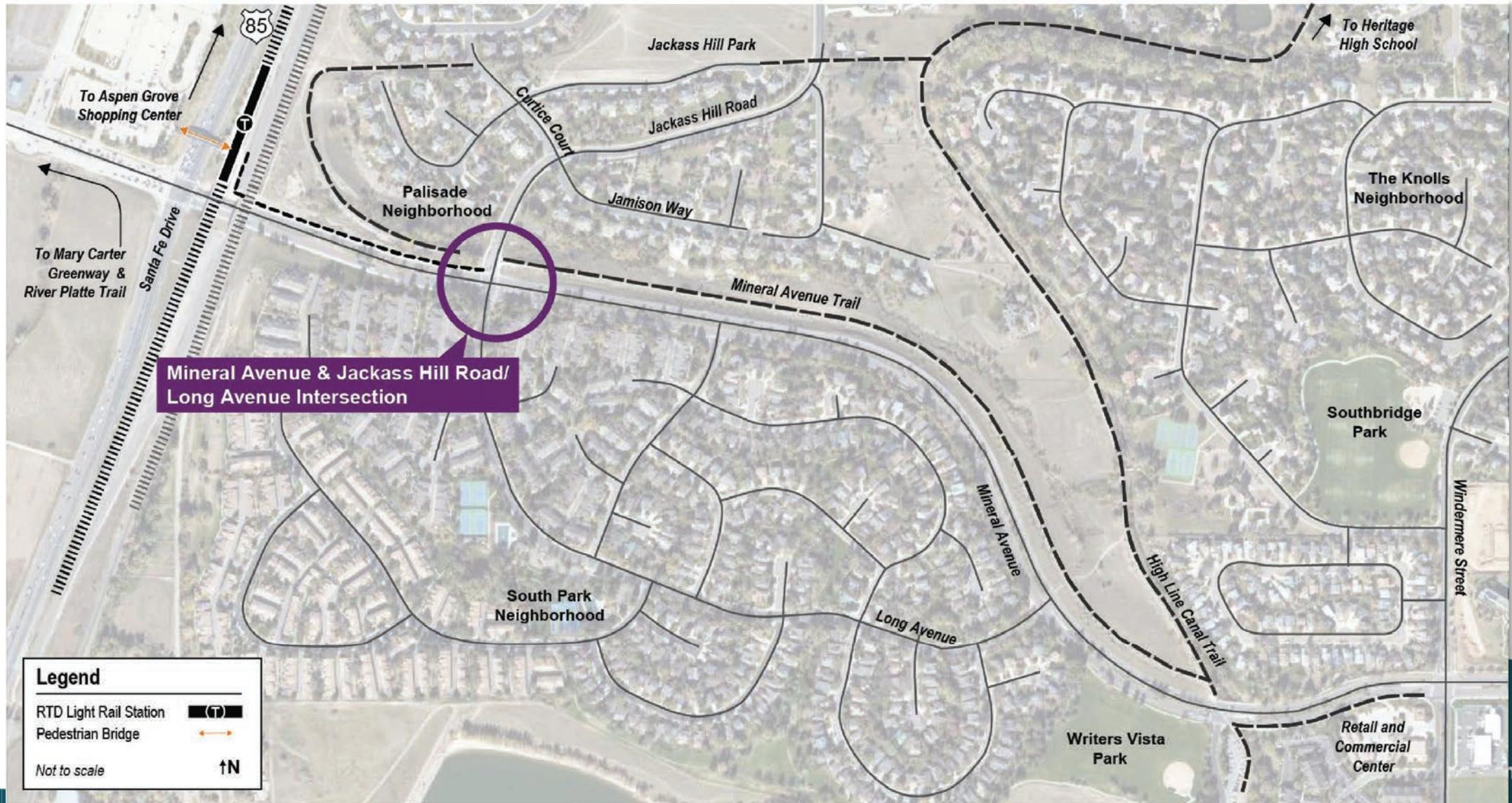
I have not witnessed and hazardous interactions between cyclists and pedestrians west of Jackass.

What adjustments should be made to the Mineral Avenue Trail improvements as the project moves into design?

For us walkers the bicycles both east and west of Jackass Hill ride out of control and too close to walkers and never call out "on your left."

Focus Area

Mineral Avenue and Jackass Hill Road/Long Avenue Intersection



Alternatives Analysis Results

Mineral Avenue and Jackass Hill Road/ Long Avenue Intersection

- Protected intersection



- ❖ Physical barriers between all modes
- ❖ Signal operations to separate movements
- ❖ Supports the City's vision for intersection operation with bike/ped focus at this location

What adjustments should be made to the Mineral/Jackass Hill/Long intersection draft improvement recommendation as the project moves into design?

Need left turn signal for northbound traffic turning west from SouthPark .

Love this kind of design. Much safer for all users, even drivers. Hope to see much more of this kind of crossing design in Littleton. This intersection needs this treatment very badly. As a walking user, the slip lanes and speed are bad.

It's completely unrealistic to funnel cyclists through Mineral and Santa Fe, commingled with vehicles. If you do that, none of the other safety improvements will matter (to me).

The de facto bike lane West of Jackass Hill is the Mineral Light Rail station. As a cyclist, I want no part of the Mineral Santa Fe intersection. It's not safe for cars, absent bikes!

Improve the SB to WB right turn movement, extend the right turn lane

Bingo...

Need to slow the cars down as they go down the hill from the High Line crossing to Santa Fe even if to the speed limit now as they go 60 mph or more

I've seen this design in other cities. It's much better for everybody. Would like to see it at Mineral here and at Santa Fe, tbh

The issue at this intersection is vehicle thruput in an East-West direction. This can't ignore the impacts of the development of the property at the Santa Fe \ Mineral intersection. You should maximize the thruput while improving the safety.

What adjustments should be made to the Mineral/Jackass Hill/Long intersection draft improvement recommendation as the project moves into design?

Bicycles ride through light rail station, need flashing light that says please dismount!

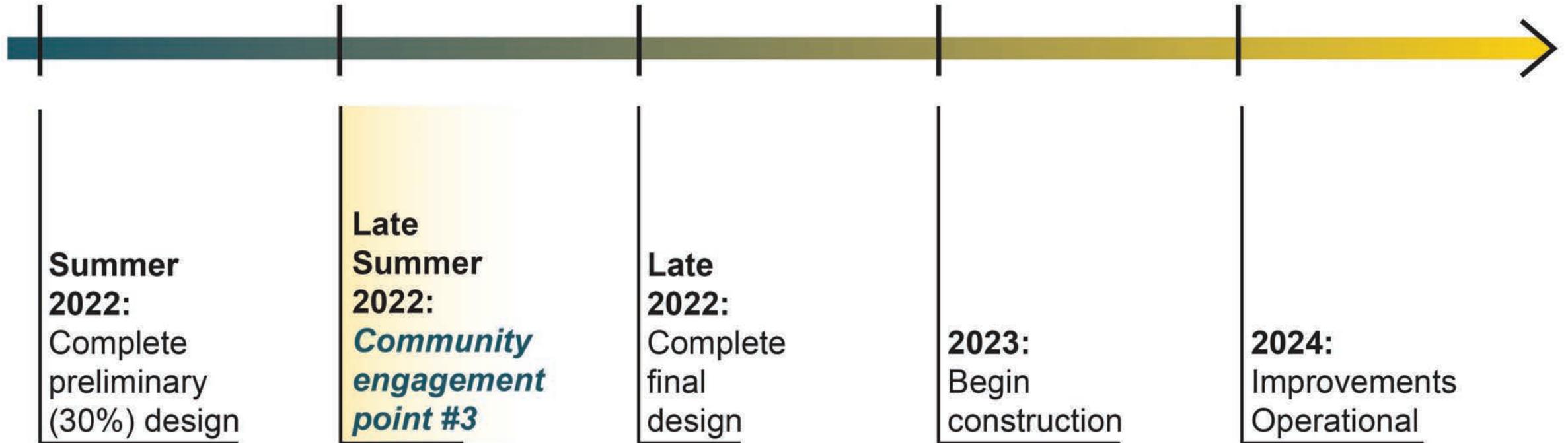
Next Steps



Design Project Considerations

- Combine selected alternatives for each location into a cohesive project
- Determine logical and safe connections at project limits
- Optimize \$2M available
 - ✧ Each element must be addressed in the overall solution
 - ✧ Address as much as possible at each location
 - ✧ City will continue to pursue funds for preferred options outside of budget feasibility
- Consider prioritization input from public comment

Next Steps



Stay Engaged

- Participate in community engagement events
 - ✧ Late Summer: Review the packaged improvements and preliminary design
- View project updates, join the mailing list, and submit comments
 - ✧ <https://www.mineralmobilityimprovements.com>
- Email or call
 - ✧ Aaron Heumann, City of Littleton Transportation Engineering Manager
pwprojects@littletongov.org, 303-795-3867



<https://www.mineralmobilityimprovements.com>

Group Discussion and Questions & Answers





Thank You!